

(19) 世界知的所有権機関  
国際事務局

528795

(43) 国際公開日  
2004年4月22日 (22.04.2004)

PCT

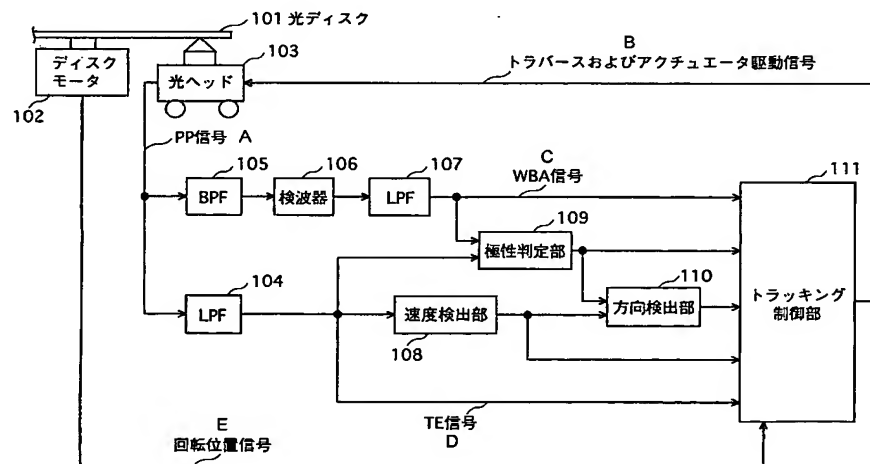
(10) 国際公開番号  
WO 2004/034388 A1

- (51) 国際特許分類<sup>7</sup>: G11B 7/085
- (21) 国際出願番号: PCT/JP2003/012869
- (22) 国際出願日: 2003年10月8日 (08.10.2003)
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語
- (30) 優先権データ:  
特願 2002-297292  
2002年10月10日 (10.10.2002) JP
- (71) 出願人 (米国を除く全ての指定国について): 松下電器産業株式会社 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.) [JP/JP]; 〒571-8501 大阪府 大阪市 大字門真1006番地 Osaka (JP).
- (72) 発明者; および
- (75) 発明者/出願人 (米国についてのみ): 石橋 謙三 (ISHIBASHI, Kenzo) [JP/JP]; 〒570-0013 大阪府 守口市 東町 1-17-12 Osaka (JP). 上田 英司 (UEDA, Eiji) [JP/JP]; 〒614-8347 京都府 八幡市 橋本平野山 86-22 Kyoto (JP). 尾留川 正博 (BIRUKAWA, Masahiro) [JP/JP]; 〒573-0077 大阪府 枚方市 東香里新町 16-25 Osaka (JP).
- (74) 代理人: 中島 司朗 (NAKAJIMA, Shiro); 〒531-0072 大阪府 大阪市 北区豊崎三丁目2番1号淀川5番館6F Osaka (JP).
- (81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,

[続葉有]

(54) Title: OPTICAL DISC TRACKING CONTROL DEVICE, TRACKING CONTROL METHOD, AND TRACKING CONTROL PROGRAM

(54) 発明の名称: 光ディスクのトラッキング制御装置およびトラッキング制御方法並びにトラッキング制御プログラム



102...DISC MOTOR  
101...OPTICAL DISC  
103...OPTICAL HEAD  
A...PP SIGNAL  
B...TRAVERSE AND ACTUATOR DRIVE SIGNAL  
106...DETECTOR  
C...WBA SIGNAL

109...POLARITY JUDGMENT SECTION  
111...TRACKING CONTROL SECTION  
108...VELOCITY DETECTION SECTION  
110...DIRECTION DETECTION SECTION  
D...TE SIGNAL  
E...ROTATION POSITION SIGNAL

(57) Abstract: An optical disc tracking control device capable of performing stable tracking. The device includes a signal detection section for detecting a tracking error signal and a wobble signal from a light spot, a velocity detection section for detecting a relative moving velocity of the light spot and the track, a polarity judgment section for judging that the light spot position is between grooves when the wobble signal amplitude value is equal to or below a predetermined value in the vicinity of the zero cross point of the tracking error signal, a moving direction detection section for

[続葉有]

WO 2004/034388 A1

## ABSTRACT

A tracking control apparatus for stable tracking lead-in of an optical disc which has wobble grooves as tracks, including: a signal detection unit that detects tracking error and wobble signals from an optical spot; a speed detection unit that calculates a relative moving speed between the optical spot and the tracks; a polarity judgment unit that judges that the optical spot is on a land if a wobble signal amplitude value is equal to or lower than a predetermined value in the vicinity of a zero-cross point; a moving direction judgment unit that, when the relative moving speed is within a predetermined range and the optical spot is on a land, judges a moving direction of the optical spot from a rise/decay direction of the tracking error signal; and a control unit that performs a tracking lead-in by reducing the moving speed, based on the moving speed and moving direction.